

IN THE CLAIMS

Claims 1-28. (Canceled).

Claim 29. (Currently amended) A method for producing pertussis toxin comprising

cultivating *Bordetella pertussis* in a culture in the presence of (1) a reduced concentration of cysteine, wherein the reduced concentration is ~~no more than 0.05~~ 0.04 to 0.1 grams of cysteine per liter, thereby reducing the concentration of sulfate ions from the metabolism of cysteine, and (2) a metal salt to sequester sulfate ions, wherein the metal is selected from the group consisting of Pb(II), Sr(II), Ag(II), and Ba(II), and isolating the pertussis toxin from the culture.

Claim 30. (Previously presented) The method according to claim 29, wherein the cysteine is contained in a culture media.

Claim 31. (Previously presented) The method according to claim 29, wherein the cysteine is contained in a supplement that is added to culture media.

Claim 32. (Previously presented) The method according to claim 29, wherein the metal salt is a halide salt.

Claim 33. (Previously presented) The method according to claim 32, wherein

the metal salt is  $\text{BaCl}_2$  or  $\text{BaBr}_2$ .

Claim 34. (Previously presented) The method according to claim 29, wherein the isolating is done by chromatography.